STORM WATER POLLUTION PREVENTION PLAN

FOR

DEFENSE LOGISTICS AGENCY/DEFENSE NATIONAL STOCKPILE CENTER
BATON ROUGE DEPOT, 2695 N. SHERWOOD FOREST DRIVE
BATON ROUGE, LOUISIANA 70814-5397

Prepared by

U.S. Army Center for Health Promotion and Preventive Medicine
ATTN: MCHB-DC-ES, Building E-1675
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March 1997

Prepared by:

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Wendy L. Gladstone
Environmental Scientist
U.S. Army Center for Health
Promotion and Preventive Medicine

Reviewed by:

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Ron Favors
Depot Manager

Approved by:

_____
F. Kevin Reilly
Chief, Environmental Staff

In accordance with the National Pollutant Discharge Elimination System, 40 CFR 122, and in accordance with EPA's General Permit for Industrial Stormwater Discharges (Permit No. 57 FR 41320), this Storm Water Pollution Prevention Plan will be implemented herein:

_____
Mary Moyer
Chief, Logistics & Operations Division

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STORM WATER POLLUTION PREVENTION PLAN CERTIFICATION

" I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

_____

F. Kevin Reilly Date
Chief, Environmental Staff

POLLUTION PREVENTION COMMITTEE

The following Committee Members are responsible for developing, implementing, modifying, and proving required reports for the Storm Water Pollution Prevention Plan and related activities.

Member	Responsibilities
Ron Favors, Leader, Depot Manager, (504)389-0278	• Coordinates all stages of the plan development and implementation. • Coordinates employee training programs. • Conducts annual comprehensive site evaluations. • Conducts or contracts annual inspection and certification of non-storm water discharges. • Administers and oversees all team members activities. • Updates the SWPPP as needed. • Maintains all records and submits reports. • Maintains updated spill records and updates the SWPPP to reflect spills.
Charles Delhoste Quality Assur. Supervisor (504) 389-0278	• Ensures good housekeeping practices. • Conducts on site preventive maintenance inspections. • Updates material inventories. • Assists the Team Leader during annual site evaluations.
Dennis Rhodes Material Handler Supervisor (504) 389-0278	• Attends meetings and assists as necessary.
Troy Ferrier Storage Specialist (504) 389-00278	• Attends meetings and assists as necessary.

SAMPLING DATA

Grab and composite samples were collected on 12 August 1992 from twenty-four outfalls for Baton Rouge's NPDES Storm Water Discharge Permit application. See Appendix for the complete storm water application with data.

The sample locations and analytical results in the permit application may not accurately represent actual storm water runoff from the material storage areas identified in the Storm Water Pollution Prevention Plan. Some of the material storage areas are flat, some are located in areas where the majority of the runoff percolates into the ground, and other areas may be too small to generate any runoff. Storm water runoff should be collected as close to the sites as possible in order to obtain representative discharge samples from just the storage areas.

Insert Fig 1 SITE MAP

SUMMARY OF ANNUAL SITE COMPLIANCE EVALUATION

Site number: _____

Evaluator(s) Title(s): _____ _____ Date: _____

SITE CHANGES: (summary of changes in materials, spill, storm water management, personnel, etc)

Per EPA General Permit, these changes will be incorporated into the SWPPP within two weeks, or by (_____).
Date

MAJOR FINDINGS:

ADEQUACY OF BEST MANAGEMENT PRACTICES

	ADEQUATE?	NOTE
GOOD HOUSEKEEPING	Yes	No
PREVENTIVE MAINTENANCE	Yes	No
INSPECTIONS	Yes	No
SPILL PREVENTION RESPONSE	Yes	No
SEDIMENT AND EROSION CONTROL	Yes	No
MANAGEMENT OF RUNOFF	Yes	No
OTHER BMPs	Yes	No

SUMMARY OF ANNUAL SITE COMPLIANCE EVALUATION

Site number: _____

Evaluator(s) Title(s): _____ Date: _____

<u>COMPLIANCE</u>:

With SWPPP: (were all recommendations and schedules met?)

With State Permit:

<u>RECOMMENDATIONS</u>:

Per the EPA General Permit, all recommendations will be implemented within 12 weeks of this evaluation, or (_____).
Date

TRAINING

1. Existing.

a. Installation Spill Contingency Plan (ISCP).

(1) Training briefings are held annually for all supervisors and operating personnel directly involved with handling, storage and disposal of hazardous waste and corrective actions for spills.

(2) All Installation Response Team members receive annual hazardous waste operations/emergency response training.

b. Hazardous Waste Management Plan (HWMP). Annual OSHA and RCRA training is given to all employees who work at, or oversee, Hazardous Waste facility operations and to all employees that are in any way involved with the handling of hazardous waste.

2. Additional Training Required.

a. All members of the Storm Water Pollution Prevention Team will meet annually to discuss the SWPPP. The Team Leader will coordinate the meeting and will update members on new developments in the State Storm Water Program.

b. All site POCs will be given a copy of the SWPPP, which will be posted, if possible, at the site. A PPT member will brief the POC annually on Plan changes and requirements.

c. As a minimum, the Team Leader will be provided annual training in storm water pollution prevention and good housekeeping. Other team members may be trained as circumstances allow.

MATERIALS INVENTORY

SITE #01, Bauxite Storage

SITE POC: Ron Favors

Activity Description: Open storage area for bauxite.

Directions: List all materials used, stored, or produced on site.

MATERIAL	STORAGE TYPE	EXISTING STORM WATER MANAGEMENT CONTROLS	On site NOW?	EXPOSED
Bauxite	Bauxite piles stored on open ground.	Piles are stored uncovered in a semi-tiered formation. Vegetation covers the majority of the piles surface area and aids in erosion control.	Yes	Yes

Insert Fig. 2

VISUAL OBSERVATIONS AND CONTAMINATION POTENTIAL

SITE #01, Bauxite Storage

Directions: List below all potential contamination sources. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.

POTENTIAL CONTAMINATION SOURCES	POLLUTANTS OF CONCERN	VISUAL OBSERVATIONS OF SITE	CONTAMINATION POTENTIAL
Bauxite	Aluminum ore, Silicon	Runoff flows into vegetated storm water ditches then to storm drains. Storm drains combine flow off site. The majority of the runoff flows north and eventually discharges to Hurricane Creek. Hurricane Creek is influent to the Comite River. Some runoff flows south into Jones Creek. Jones Creek and the Comite River are both influent to the Amite River (a tributary of the Mississippi River).	Low

SPILLS AND LEAKS

SITE #01, Bauxite Storage

Directions: Record below all significant spills and significant leaks of toxic or hazardous pollutants that have occurred at the site in the last three years prior to the effective date of the permit.

Definitions: Significant spills include, but are not limited to, release of oil or hazardous substances in excess of reportable quantities.

	DESCRIPTION			**RESPONSE PROCEDURES**	
Date (month/day/year)	**Location**	**Type of Material**	**Quantity**	**Amount Recovered**	**Material is no longer exposed to Storm Water** (yes/no)
No spills or leaks have occurred in the last 3 years.					

MEASURES AND CONTROLS

SITE #01, Bauxite Storage

Directions: Describe the existing best management practices at the site and determine additional need for best management practices.

BMP CATEGORY	EXISTING MANAGEMENT PRACTICES	NEED FOR ADDITIONAL BMPs?
GOOD HOUSEKEEPING	None.	No
PREVENTIVE MAINTENANCE	Piles are kept from spreading.	No
INSPECTIONS	Periodic inspections are performed to ensure that pile spreading is minimized.	No
SPILL PREVENTION RESPONSE	None.	No
SEDIMENT AND EROSION CONTROL	Vegetative growth. Step-graded pile formation.	No
MANAGEMENT OF RUNOFF	Runoff enters an adjacent vegetated storm water ditches.	No
OTHER BMPs	None.	No

PROPOSED BEST MANAGEMENT PRACTICES

SITE #01, Bauxite Storage

Directions: List the proposed best management practices. Provide a description of each BMP, the steps necessary to implement the BMP (i.e., construction or design). Develop a schedule for implementing each BMP.

BMP CATEGORY	DESCRIPTION	SCHEDULED DATE OF IMPLEMENTATION
None Recommended.		

NON STORM WATER DISCHARGE ASSESSMENT

SITE #01, Bauxite Storage

DATE: *18 March 1997*

METHOD USED: *Dry weather visual observations.*

DESCRIPTION OF RESULTS: *No discharge was observed from the bauxite storage area during dry weather.*

AUTHORIZED NON STORM WATER DISCHARGES: *None.*

UNAUTHORIZED NON STORM DISCHARGES: *None.*

REMEDIATION PLAN:

ASSESSMENT PERFORMED BY:

_____

WENDY L. GLADSTONE

Environmental Scientist

MATERIAL INVENTORY

SITE #02, Ingot Storage (lead and tin)

SITE POC: Ron Favors

Activity Description: Open storage for lead and tin ingots.

Directions: List all materials used, stored, or produced on site.

MATERIAL	STORAGE TYPE	EXISTING STORM WATER MANAGEMENT CONTROLS	On site NOW?	EXPOSED
Lead	Ingots stored on concrete slab.	Storage area is kept clean and well maintained. Storage area is fenced and locked.	Yes	Yes
Tin	Ingots stored on concrete slab.	Storage area is kept clean and well maintained. Storage area is fenced and locked.	Yes	Yes

Insert Fig 3

VISUAL OBSERVATIONS AND CONTAMINATION POTENTIAL

SITE #02, Ingot Storage (lead and tin)

Directions: List below all potential contamination sources. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.

POTENTIAL CONTAMINATION SOURCES	POLLUTANTS OF CONCERN	VISUAL OBSERVATIONS OF SITE	CONTAMINATION POTENTIAL
Lead	Lead	Runoff flows to vegetated ditches surrounding the concrete pads. The ditches flow off post and eventually discharge to Hurricane Creek. Hurricane Creek flows east and is influent to the Comite River (a tributary of the Mississippi River. Ingots have the potential to leach high lead concentrations in runoff.	High.
Tin	Tin	Runoff flows to vegetated ditches surrounding the concrete pads. The ditches flow off site and eventually discharge to Hurricane Creek. Hurricane Creek flows east and is influent to the Comite River (a tributary of the Mississippi River.	Low

SPILLS AND LEAKS

SITE #02, Ingot Storage (lead and tin)

Directions: Record below all significant spills and significant leaks of toxic or hazardous pollutants that have occurred at the site in the last three years prior to the effective date of the permit.

Definitions: Significant spills include, but are not limited to, release of oil or hazardous substances in excess of reportable quantities.

	DESCRIPTION			**RESPONSE PROCEDURES**	
Date (month/day/year)	**Location**	**Type of Material**	**Quantity**	**Amount Recovered**	**Material is no longer exposed to Storm Water** (yes/no)
No spills or leaks have occurred in the last 3 years.					

MEASURES AND CONTROLS

SITE #02, Ingot Storage (lead and tin)

Directions: Describe the existing best management practices at the site and determine additional need for best management practices.

BMP CATEGORY	EXISTING MANAGEMENT PRACTICES	NEED FOR ADDITIONAL BMPs?
GOOD HOUSEKEEPING	Ingots are being banded and assembled according to material type. Stored in a clean, well-maintained area.	No
PREVENTIVE MAINTENANCE	None.	No
INSPECTIONS	None.	No
SPILL PREVENTION RESPONSE	None.	No
SEDIMENT AND EROSION CONTROL	Storage on concrete pad.	No
MANAGEMENT OF RUNOFF	None.	Yes
OTHER BMPs	None.	No

PROPOSED BEST MANAGEMENT PRACTICES

SITE #02, Ingot Storage (lead and tin)

Directions: List the proposed best management practices. Provide a description of each BMP, the steps necessary to implement the BMP (i.e., construction or design). Develop a schedule for implementing each BMP.

BMP CATEGORY	DESCRIPTION	SCHEDULED DATE OF IMPLEMENTATION
MANAGEMENT OF RUNOFF	Install riprap in drainage ditch around ingot storage area. Sweep area regularly.	January 1998

NON STORM WATER DISCHARGE ASSESSMENT

SITE #02, Ingot Storage (lead and tin)

DATE: *18 March 1997*

METHOD USED: *Dry weather visual observations*.

DESCRIPTION OF RESULTS: *No discharge was observed from the ingot storage area during dry weather.*

AUTHORIZED NON STORM WATER DISCHARGES: *None.*

UNAUTHORIZED NON STORM DISCHARGES: *None*.

REMEDIATION PLAN:

ASSESSMENT PERFORMED BY:

WENDY L. GLADSTONE
Environmental Scientist

MATERIALS INVENTORY

SITE #03, Bauxite Storage

SITE POC: Ron Favors

Activity Description: Open storage area for bauxite.

Directions: List all materials used, stored, or produced on site.

MATERIAL	STORAGE TYPE	EXISTING STORM WATER MANAGEMENT CONTROLS	On site NOW?	EXPOSED
Bauxite	Bauxite piles stored on open ground.	Piles are stored uncovered in semi-tiered pile. Vegetation covers the majority of the piles surface area and aids in erosion control.	Yes	Yes
Lead	Ingots stored on open ground	Ingots removed from site in 1996.	No	No

Insert Fig. 4

VISUAL OBSERVATIONS AND CONTAMINATION POTENTIAL

SITE #03, Bauxite Storage

Directions: List below all potential contamination sources. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff.

POTENTIAL CONTAMINATION SOURCES	POLLUTANTS OF CONCERN	VISUAL OBSERVATIONS OF SITE	CONTAMINATION POTENTIAL
Bauxite	Aluminum, Silicon	Runoff flows into vegetated storm water ditches then to storm drains which combine before eventually discharging to Hurricane Creek to the north, or Lively Bayou to the south. Hurricane Creek is an influent to Comite River, a tributary of the Amite River. Lively Bayou enters the Amite River which is a tributary of the Mississippi River.	Low

SPILLS AND LEAKS

SITE #03, Bauxite Storage

Directions: Record below all significant spills and significant leaks of toxic or hazardous pollutants that have occurred at the site in the last three years prior to the effective date of the permit.

Definitions: Significant spills include, but are not limited to, release of oil or hazardous substances in excess of reportable quantities.

	DESCRIPTION			**RESPONSE PROCEDURES**	
Date (month/day/year)	**Location**	**Type of Material**	**Quantity**	**Amount Recovered**	**Material is no longer exposed to Storm Water** (yes/no)
No spills or leaks have occurred in the last 3 years.					

MEASURES AND CONTROLS

SITE #03, Bauxite Storage

Directions: Describe the existing best management practices at the site and determine additional need for best management practices.

BMP CATEGORY	EXISTING MANAGEMENT PRACTICES	NEED FOR ADDITIONAL BMPs?
GOOD HOUSEKEEPING	None.	No
PREVENTIVE MAINTENANCE	Piles are kept from spreading.	No
INSPECTIONS	Periodic inspections are performed to ensure that pile spreading is minimized.	No
SPILL PREVENTION RESPONSE	None.	No
SEDIMENT AND EROSION CONTROL	Vegetative growth.	No
MANAGEMENT OF RUNOFF	Runoff enters vegetated storm water ditches.	No
OTHER BMPs	None.	No

PROPOSED BEST MANAGEMENT PRACTICES

SITE #03, Bauxite Storage

Directions: List the proposed best management practices. Provide a description of each BMP, the steps necessary to implement the BMP (i.e., construction or design). Develop a schedule for implementing each BMP.

BMP CATEGORY	DESCRIPTION	SCHEDULED DATE OF IMPLEMENTATION
None Recommended.		

NON STORM WATER DISCHARGE ASSESSMENT

SITE #03, Bauxite Storage

DATE: *18 March 1996*

METHOD USED: *Dry weather visual observations*.

DESCRIPTION OF RESULTS: *No discharge was observed from the ingot storage area during dry weather.*

AUTHORIZED NON STORM WATER DISCHARGES: *None*.

UNAUTHORIZED NON STORM DISCHARGES: *None.*

REMEDIATION PLAN:

ASSESSMENT PERFORMED BY:

_____

WENDY L. GLADSTONE
Environmental Scientist

APPENDIX

PERMIT APPLICATION/SAMPLING DATA